



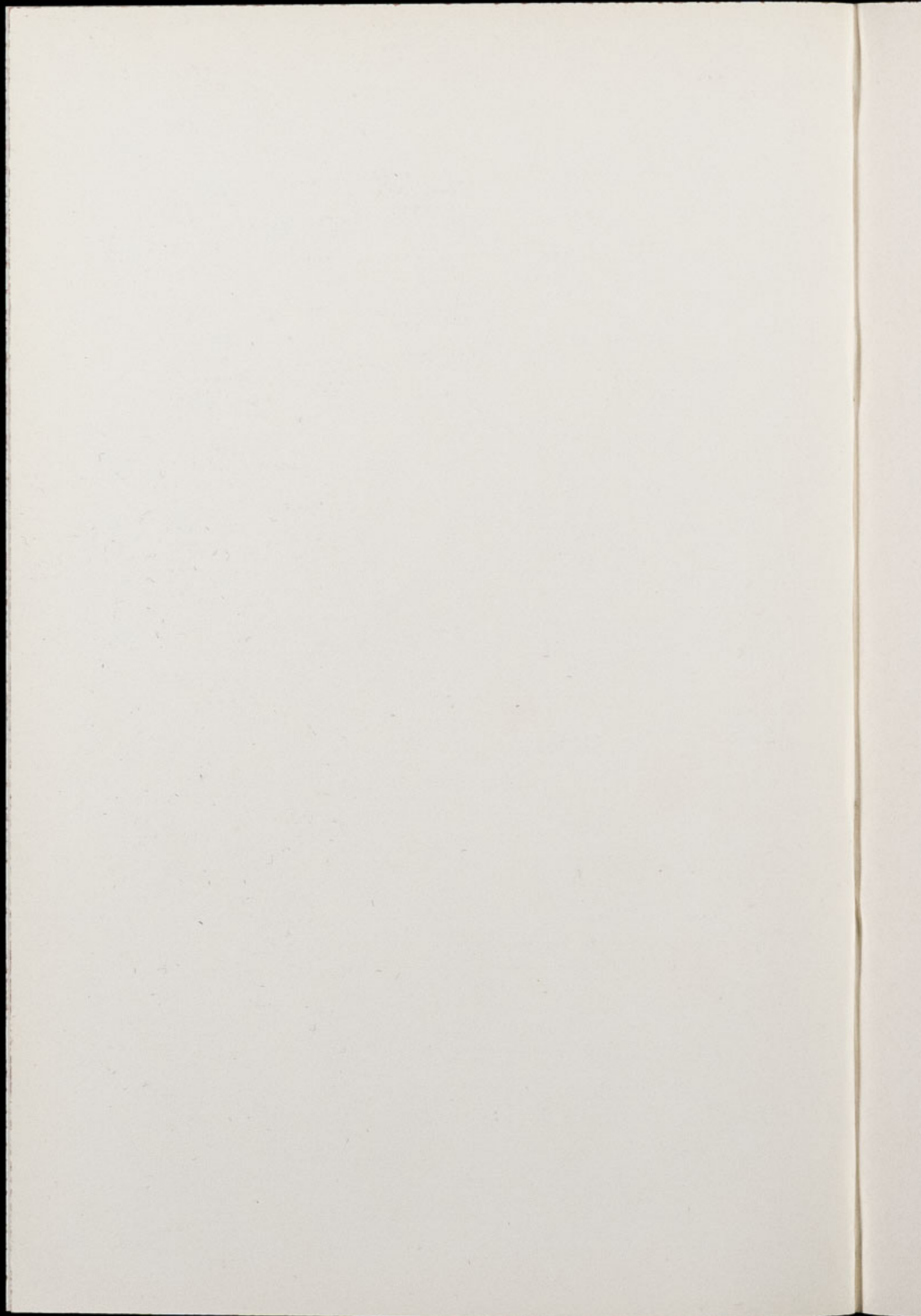
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Chester Zoo News

THE NORTH OF ENGLAND ZOOLOGICAL SOCIETY
ZOOLOGICAL GARDENS, UPTON - BY - CHESTER

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Introduction

Despite the severe winter, animal losses have not been heavy. The Bird Section has suffered more — not so much from the cold as from the depredations of Foxes.

We have to thank the following for permission to use the photographs and illustration included in this issue:—

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E. Kirkland, Esq.
M. D. Murphy, Esq.
Mr. & Mrs. E. Sorby.
J. Whitworth, Esq.

COVER: Our "cover girls" this month are "Polly" and "Jeannie," two baby Chimps, of whom you will read more on page 5.

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A PREVIEW OF SOME OF THE BUILDING WORK TO BE CARRIED OUT AT CHESTER ZOO THIS YEAR

Apart from the completion of the Tropical House, the most important project of 1963 will be the building of a new Monkey House. We have felt for some time that the existing Monkey House does not conform to the standards we have set for Chester Zoo. The present Monkey House was erected in 1946-7. At that time building materials were almost impossible to obtain and, therefore, a great deal of scrap was used in its construction. It has served its purpose adequately, but now we feel it is time to provide more attractive accommodation for our collection of Monkeys.

As this issue of the magazine goes to press, the foundations of the new building are being laid. The House will be situated on the left of Farm Road and, like several other buildings at Chester Zoo, will be constructed mainly of pre-cast concrete. Practically the whole of the roof will be of fibre glass. In length the new Monkey House will be just over two hundred feet, approximately sixty feet wide and about twenty-four feet high at the apex. Although simple in design, the new building will be as modern and well-equipped as any in the Zoo world today.

The cages in the House, of which we propose to have over thirty, will be large, airy and well-lit and each cage will be duplicated to facilitate cleaning. Between the cages we intend planting a variety of plants and you will read more about these in the Gardening Section of a future issue. Needless to say, it would be impossible for us to envisage any new building at Chester Zoo, without plant-life.

In keeping with modern techniques of confining Monkeys, the animals will be separated from the public by means of armour-plated glass. From experience we have found that this is the best method of protecting the animals from the colds and other minor human ailments, unwittingly transmitted by members of the public.

The heating of the new Monkey House will be similar to that which is proving so successful in the Pachyderm House. Oil-fired Boilers will heat the air to be ducted round the entire House. Apart from heating, this system will also act as an air-purifier, so that when we have heavy fog or smog, the animal accommodation will always be free of polluted air.

In the past we have provided both outdoor and indoor cages for the Monkeys but, in this particular House, the air will be kept so fresh and pure that outside cages will be completely unnecessary. It will also mean that the animals will be protected from the severe climatic conditions, which we experience from time to time.

We intend incorporating a food preparation kitchen into this building, in such a position that our visitors can view the care which is taken in the preparation of each animal's diet.

It has not yet been possible to repair the damage done to the Tropical House by the gales of 15th December. We are many months behind schedule on this building and as we are still hoping to have it completed by the summer, there is some hard work ahead for our building staff when the weather improves.

The most unfortunate result of the delayed progress on the Tropical House is that the planting of the House will be too late to allow the plants to establish themselves properly this year. When we are ready for the introduction of plant-life into this building, the tropical atmosphere will be turned on and we are hoping that this atmosphere will cause some of the tropical vegetation to develop very quickly.

One end of the Tropical House will contain the indoor accommodation of the Mountain Gorillas, which are growing so rapidly that they will very soon require much more spacious quarters than those at present allocated to them in the Ape House.

Another reason why we are so anxious to complete the Tropical House is that pressure for a new Reptile House is becoming greater as time goes by. As was stated in a previous issue, a new Reptile House is being incorporated in the Tropical House.

Rather less interesting, but nonetheless essential, is the construction of two public toilets. We hope these will be erected before the season is in full swing.

It can be seen that we have a tremendous amount of building work to do, as soon as the severe weather is past. At the time of writing these notes there appears to be no sign of a lasting thaw.



E. Kirkland

"JEANNIE" AT A FEW WEEKS OLD

"POLLY" AND "JEANNIE"

The youngest chimps in our collection are great favourites with Staff and Visitors alike. Polly and Jeannie, born six weeks apart at the end of 1961, are two of the eleven baby Chimpanzees born at Chester Zoo over the past seven years.

Chimpanzees have always been a great feature of the Zoo and two of the adult females in our large groups have bred successfully many times. This is a good thing, since it provides a nucleus of young, healthy animals who, as they grow up, will form a new group of Chimpanzees ready to take over when our original ones have gone.

Every so often it becomes necessary to hand rear these baby Chimps. Like human babies, each Chimp requires individual treatment, but the one which presented us with the greatest number of problems was Jeannie.

Jeannie was born on 25th October, 1961 — apparently prematurely. Her mother — Meg — who normally nursed her own babies, solicitously examined this baby and then abandoned it. The usual birth weight of our young Chimpanzees is somewhere in the region of three and a half to four lbs. Jeannie weighed approximately one pound and a half. The sutures of her skull were not fused and it seems possible that it was the resulting softness of the skull which upset Meg after the baby's birth.

When found, the tiny Chimp was cold and virtually dead, as all breathing had ceased. After persistent efforts with mouth to mouth artificial respiration, Jeannie shuddered back to life and gradually her body temperature was raised to normal level. For a long time little Jeannie hovered between life and death, but eventually she started to gain weight and began to take an interest in living.

When Jeannie was exactly six weeks old, our other breeding female Chimpanzee — Babu — produced her 1961 off-spring. Babu is notoriously lazy with her babies and makes no effort to cater for their needs. This baby — another female which we named Polly — was welcomed to Jeannie's "Nursery" and, in later months the two babies proved to be wonderful companions for each other. Polly was an exceptionally robust infant and during their first year

of life the two youngsters competed with one another for superiority in everything — be it rate of growth, climbing, jumping, or learning to drink from a cup.

Young Chimpanzees, such as these, spend their nursery years in the care of the girl Keepers on our staff, getting as much individual attention as they demand and time permits. At about three years of age they are ready to be transferred to our Ape House where, although they are too small to join the big animals, they can be introduced to other young Chimps and, in turn, take their place in a Chimpanzee group on one of the islands.

WATERBUCK AND LECHWE

There are two species of Waterbuck and several sub-species. The *Ellipsiprymmus* is sometimes called the Eastern Waterbuck, as it ranges from Portuguese East Africa to Somaliland. It has a very distinct white band circling its rump and a white crescent-moon shaped marking under its chin. The other species, the *Defassa*, has no white patch under the chin and has a complete white rump. This latter species ranges from West Africa across Central Africa into Kenya, where the two species can be seen together.

In the wild, Waterbuck are usually found in small herds of up to twenty animals and, as their name implies, they are never very far away from the rivers and lakes of Africa. If disturbed or attacked, these animals often take to the water and so fond are they of water that they spend many hours standing almost totally submerged.

Waterbuck are extremely handsome beasts although their long, heavy coat gives them the appearance of being a cold climate animal. Only the males possess horns and these are large and upward-curving, thick at the base and heavily ridged, but tapering finally. When not actually feeding, Waterbuck hold their heads in a particularly erect position, so that their general bearing is dignified rather than graceful. The female can give the impression of a somewhat haughty aunt.

Another characteristic of the Waterbuck is its pungent scent. This remains in the vicinity long after the animal has moved on and seems to afford a certain protection, as even Lions prefer not to kill Waterbuck, if other animals are available.



R. T. Bloom

FEMALE WATERBUCK AND YOUNG

We first obtained a male Waterbuck from West Africa in July, 1958. This animal belonged to a sub-species of Defassa — *Kobus defassa unctuosus* and, like many of the West African antelope, was much smaller than his East African counterpart. He was a young animal on arrival and during his first year at Chester Zoo lived with a Greater Kudu. We were then able to import two East African Defassa females in November, 1959 and, after due quarantining, the three were put together.

As was only to be expected, the male soon became very aggressive towards anyone approaching him and in July, 1961 the first baby was born. This was a lovely little male, every bit as shaggy and as dignified as his parents, with a little white patch on his nose and rump. One morning he was reported missing and it was some time before he was found — sitting in the ditch at one end of his enclosure, with just his head out of the water. He sat in this ditch on frequent occasions.

In January, 1962, the original male was accidentally killed and ten months later, long after we had given up hope of an offspring, another calf was born. Not only has it survived the terrible cold, but it looks a very fine little animal and, being a female, is a valuable addition to our Waterbuck collection.

Lechwe are closely related to the Waterbuck, in fact they are frequently called Waterbuck. In appearance they are smaller, less shaggy and the horns first curve back and then upwards and outwards.

There are two species, one called Mrs. Grey's Lechwe — which lives only on the banks of the Nile in Southern Sudan — and the Red Lechwe. The latter is the species which we have at Chester and its range is in the floodlands of Northern South West Africa, South East Congo and Northern Rhodesia.

At one time the Lechwe was very common but, owing to tribal hunting, its numbers have decreased alarmingly during the last few years. By far its largest stronghold is the Kafue flats of Northern Rhodesia and even here its numbers have dwindled from two hundred and fifty thousand to twenty five thousand. Enormous herds still congregate on the Kafue flats and a recent study has shown that these antelope play an important part in the ecology of the area.

Where there are large herds of Lechwe, large shoals of fish are also found. Lechwe can often be seen standing knee-deep in water, cropping aquatic plants in the same manner as other antelope graze grass.

We were first presented with a pair of Red Lechwe by Major Gerald Taylor of the Game Department of Northern Rhodesia and after much fuss and bother, during which a special permit had to be asked for in Parliament, the animals were allowed into this country by air. They arrived with a plane load of other animals in February, 1958, to be greeted by bitterly cold weather and thick snow on the ground. Actually the Lechwe were the first inmates of our then new Quarantine Station at Birkenhead — arriving before the building was quite completed.

The Lechwe were about nineteen months old on arrival and beautifully tame, having been hand-reared by the Game Warden. "Gladys," as the female was named, produced a male calf before she had completed her year in quarantine. Since then she has had five youngsters. Unfortunately only one has been a female. This year, however, we are hoping to have a successful breeding of the second generation.



R. T. Bloom

RED LECHWE GROUP

When Lechwe babies are born, they are soon on their feet, but they have a somewhat unbalanced appearance, as their hind legs seem to be so much longer than the front ones and this rather tips them forwards. They grow quickly in stature and in poise and within a few weeks the horns of the males are clearly visible.

With a mixed group of Lechwe, one male usually dominates the herd. In the wild, surplus males form up into their own herds, living in the same area but somewhat apart from the main group.

THE GARDENING SECTION

The severe weather still continues and routine outdoor work in the Gardens gets further behind. When the long awaited thaw does come, it will still be some time before we can get on with things, as the frost has penetrated to a depth of some two feet and will take a lot of thawing out.

Indoors, preparations have now been completed for the permanent planting of the Rhinoceros House. Varieties of Fuchsia have been planted along the back wall and will be grown up over

the public passage, to give visitors an excellent view of these lovely, old-fashioned flowers. The walls dividing the enclosures have been planted with Camellias and with *Acacia dealbata* — this latter to afford a profusion of foliage and flower for roof and end wall coverage. It will, of course, take the *Acacia* a few years to attain the required coverage and sub-tropical annual Climbers have also been planted as a temporary measure.

The landscape work and new extensions planned for this winter will have a very late start. Some of the delayed extensions are in the area of new enclosures around the Rhino House. Beds and borders have to be made and it is intended to plant these with various forest trees and a variety of flowering shrubs. We will be able to carry on later than usual with lifting and planting this year, as the flow of sap will be much retarded by the severe weather.

The Porcupine pits, by the side of the Polar Bear enclosure, have been filled in with the intention of making a rockery on this site. When the ditches to the enclosures mentioned above were excavated, loads of top soil were put on one side for the new rockery. We are indeed fortunate to have such an unlimited supply of good top soil to draw on in the Zoo. In addition to rock plants, we shall introduce into this Garden, such items as *Cupressus* and Camellias. These have already been propagated and grown on in our nurseries. A few standard *Acers* will also be planted here.

If time permits, the Gardens behind the Russian Bears enclosure will be improved. This was the first garden to be made in the Zoo and is now due for a new lay out. The area is on the wet side and will be planted with *Primulas* (which have been raised from seed for this purpose) and other moisture loving plants.

When the new Monkey House is completed, we shall have further flower beds and shrubberies to lay out around the building and some hundreds of indoor plants will be required for the inside of the House. When new extensions are made, the Gardeners are always the last to be able to get on with their part of the job, as they cannot begin until the builders move out.

The new Greenhouses are nearing completion and we are impatient to move plants into them from our present overcrowded Houses, in order to make room for summer bedding plants which are now getting on the way. Further comments on our nurseries are planned for future issues of the magazine.

Young animals in the snow



HUSKY PUPPIES

Mr. & Mrs. E. Sorby



LION CUBS AND MOTHER

Mr. & Mrs. E. Sorby

NOTES ON REPTILES

Although many people have a horror of snakes, our Reptile House is still one of the most popular exhibits in the Zoo. It seems to have a tremendous fascination, even for those who profess a hatred for snakes.

Our present Reptile House is an old building but it is modern in its method of presentation. Many Reptiles are normally nocturnal in habit and are not inclined to be particularly active during the day. Therefore a great deal depends on the skilful positioning of rocks and plants, to make sure that the snakes are induced to settle down in a part of the cage where they can easily be seen by visitors.

People today are far better informed about the habits of Reptiles than they used to be. One rarely hears remarks such as; "look at its sting," as the slender forked tongue slides in and out of the snakes mouth or; "isn't it slimy?" as the light reflects off the shiny, softly-patterned scales of the creature. Anyone who has had the opportunity of touching a snake can quickly dispel the latter belief. Snakes have completely dry skins; for the most part they are smooth, only those possessing keeled scales — like members of the Viper family — are rough in appearance but, even so, they are not unpleasant to touch. The scales, incidentally, are a useful method of identifying the only poisonous species of snake found in Britain — the Viper or Adder. The two harmless British snakes — the Grass Snake and the Smooth Snake — are smooth scaled and, therefore, usually shiny to look at, whereas the Viper has keeled scales and is dry, rough and often dusty in appearance.

All Reptiles are cold-blooded. This means that they take their temperature from their surroundings — if they come out of a warm cage, then they are equally warm themselves. Should the surrounding temperature be lowered then the snakes become correspondingly colder. If it is necessary to handle, or perhaps unpack, poisonous snakes, it is quite a usual practice to lower the temperature a little, so that the snakes reactions are slowed down. The handling operation is then slightly less dangerous.

Not only for personal safety, but for the welfare of the snakes themselves, every effort is made to avoid handling or disturbing snakes un-necessarily. Our two Green Mambas, for instance, have been in the Zoo since July, 1952. They have lived in the same cage since then and there has never been any need to handle them in any way.



J. Whitworth

TIMBER RATTLESNAKE

All venomous snakes in the collection are fully-fanged — that means that no attempt is ever made to denude them of their poison. This keeps the snake healthier, since there is no risk of mouth damage or infection and various properties contained in the venom are believed to aid digestion. The snakes are fed dead mice, rats, chicks, etc., but the snake instinctively strikes and bites at the item of food, even though it is dead. Thus the poison is injected into the food of the snake in the same way it would be injected into a kill in the wild.

Snakes, in fact most Reptiles, are extremely nervous creatures. Any drastic alteration in routine, such as the introduction of a newcomer into a cage of already established snakes, is sufficient to have an adverse affect on all the reptiles concerned. This does not mean that no snake should ever be handled. As is the case with many other highly nervous animals, once snakes have gained a certain confidence in their new surroundings they frequently become tame. This tameness or even liking for being handled is usually found in members of the Boa or Python family. However, the same can apply to poisonous varieties of snakes — although the risk involved makes any advances towards them severely impractical.

AQUARIUM NEWS

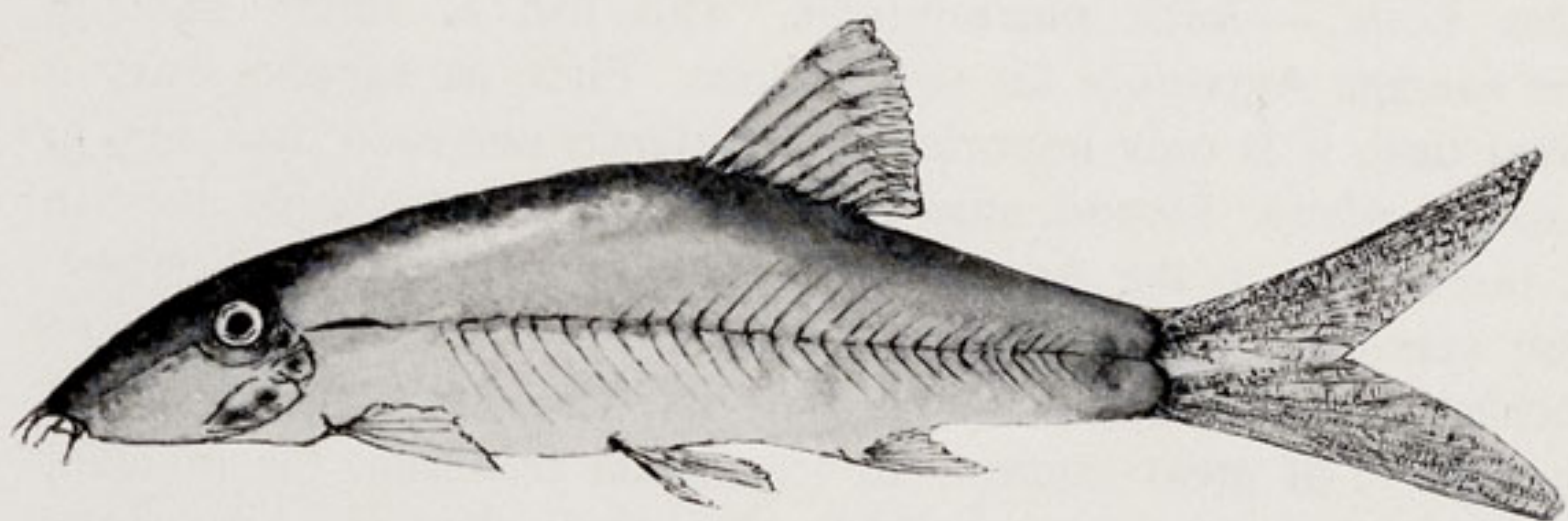
The latter half of January and the beginning of February have brought with them more than the usual amount of bad weather, which has in turn had quite a slowing down effect on the work in the Aquarium. For most of this time the entire water supply to the Aquarium was frozen solid, with the resulting complication that other sources of water had to be obtained for maintaining the tanks.

Temporary measures included the use of an enormous length of hosepipe, which siphoned water out of the artesian well, situated by the Sea Lion Pond. This well, incidentally, never freezes solid. The pipe led across the flower beds to the fast dwindling supply in the cold water reserve tanks. These tanks, in turn, were being emptied into the tropical section by a water pump, which first circulated the water around a boiler, thus heating it to the required temperature. Altogether this sounds a pretty complicated system, but it is one which worked admirably. Eventually a more permanent pipe-line was laid from the artesian well to the sinks, thus taking care of the washing up problem.

Since last month's issue, the following fish have been added to the tropical freshwater section:—Piranhas, Blue Botias, Red-tailed Black Sharks and Sucking Loach — all of which have settled in very well and are already showing signs of growth.

The shoal of twelve Piranhas is by far the most interesting addition to the Aquarium for some time. In future months we are sure they will present us with a series of problems which may prove difficult to solve.

It is a widely known fact that Piranhas in their natural habitat are, to a certain extent, gregarious. Hunting in shoals they will search for food which, if still living, will be subdued by sheer weight of numbers. It is perhaps reasonable to assume, therefore, that a shoal of Piranhas would adapt themselves to life in captivity and settle down in a tank of suitable proportions. This, it seems, is not the case, as almost everyone who has attempted to keep Piranhas in



M. D. Murphy

BOTIA PULCHRIPINNIS

any numbers has met with failure. In fact, to the best of our knowledge, none of the Aquariums in the British Isles can boast a shoal of Piranhas. Certainly there are many solitary specimens exhibited, which attract a great deal of attention, but these are almost invariably the sole survivors of an attempt at rearing in a shoal in one tank. If this is not the case, then they have been bought singly and reared on their own. Indeed we have to turn to the continent, notably Germany, before we find any success in this field.

A constant watch is kept on our shoal of Piranhas for signs of aggression but, fortunately, fighting has not occurred. They have all proved to be voracious feeders and are all growing at an amazing rate. We have at present two species of Piranha. The original — *Serrasalmus spilopleura* — may be recognized by its blue-black body, large head and powerful lower jaw, armed with a row of very impressive teeth. The new arrivals — *Serrasalmo rhombeus*, on the other hand, may be recognized by their bright silver bodies, covered with numerous dark spots. The caudal and anal fins show pale orange tints with a black border, this being strongly emphasised in the caudal fin. As time progresses we hope that this shoal of young Piranhas will develop the striking blue heads and gills and fierce, protruding jaw of the adult. Judging by the amount of meat and fish consumed daily, this change will not take long.

Another interesting addition, hailing from Thailand, is the Blue Botia, — *Botia pulchripinnis*. This fish is rarely seen in the average Aquarium for two reasons. First, as supplies vary a great deal, it is only imported intermittently and even then only in small numbers. Second, even when the species is available, the fish is rarely seen in the Aquarium, being of a very secretive nature. Our specimens are at present a little insignificant, being but one inch long. They will, however, grow to six inches in length and should then prove of great interest. In true Botia tradition, the moment our specimens were introduced to their tank, they dived headlong to the bottom, where they proceeded to dig themselves in under the nearest rock.

They may still be seen here, occasionally poking a long, blue and vaguely pensive nose into the gravel, their eyes gyrating wildly in an attempt to "keep tabs" on their relatives swimming in the water above. These amusing creatures will occasionally move furtively from rock to rock around the back of the tank, or, if they feel in a more adventurous mood, they will dash frantically across the exposed front of the tank and dive headlong under their rock where they will sit, looking rather surprised to find that nothing had been chasing them after all.

A most amusing situation arose when it was necessary to catch a suitable Botia and place it in an observation tank, in order to complete the line drawing on page fifteen. On looking into the exhibition tank it was found that all the Botias had vacated their usual site under the rock and had apparently disappeared. Further investigation discovered three Botias in the bottom of an extremely deep and narrow disused filter, built into the corner of the tank. The fish refused to come out into the tank and a large plastic syphon tube had to be employed to suck them out into a bucket. The remaining Botia was found inside a lead syphon tube which, judging by the fit, might well have been tailor made. To complicate matters still further, the Botia retaliated to the slightest movements on our part by raising two large gill spines on its head, thus bracing itself against the inside of the tube. We eventually persuaded the Botia to move itself backwards down the tube by leaving only its tail end submerged under water. In this way, after much twisting and turning, it heaved itself clear of the tube and flopped back into the tank.

